

REMARKS

Claims 1-13 are pending in this application. Claims 3, 6-8 and 10 stand withdrawn.

By this Amendment, claim 1 is amended. (See the specification at paragraph [0023], for example.) No new matter is added.

The Office Action objects to claim 1. By this Amendment, Applicants amend claim 1 to obviate this objection. Accordingly, Applicants request that the objection be withdrawn.

The Office Action rejects claims 1, 2, 4, 5, 11 and 13 under 35 U.S.C. §103(a) as being unpatentable over Mashino (JP 2001-326305) in view of Takayuki (JP 08-253324); and claims 1, 2, 9 and 12 under 35 U.S.C. §103(a) as being unpatentable over Takeshima (JP 11-214245) in view of Iino (U.S. Patent No. 6,370,013) and Takayuki. Applicants respectfully traverse the rejections of the claims.

Mashino, Takayuki, Takeshima and Iino, either alone or in any combination, do not disclose or suggest a dielectric thin film that includes at least one rare earth element Re selected from Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu, and an amount of substitution by the rare earth element Re, X, is in the range of (i) 0.4 ≤ X ≤ 1.8 in the formula $Bi_2A_{2-x}Re_xB_3O_{12}$, and (ii) 0.01 ≤ X ≤ 2.0 in the formula $Bi_2A_{3-x}Re_xB_4O_{15}$, as recited in independent claim 1.

In particular, the Office Action admits that Mashino does not disclose that the dielectric film being formed with a bismuth layer structured compound. Further, Mashino does not disclose that the dielectric film including a rare earth element, let alone at least one rare earth element Re selected from Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu, and an amount of substitution by the rare earth element Re, X, is in the range of (i) 0.4 ≤ X ≤ 1.8 in the formula $Bi_2A_{2-x}Re_xB_3O_{12}$, and (ii) 0.01 ≤ X ≤ 2.0 in the formula $Bi_2A_{3-x}Re_xB_4O_{15}$.

Further, the Office action admits Takeshima does not disclose the dielectric film being formed with a bismuth layer structured compound. Additionally, Takeshima does not disclose that the dielectric film includes a rare earth element. Therefore, Takeshima does not disclose dielectric layers that include at least one rare earth element Re selected from Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu, and an amount of substitution by the rare earth element Re, X, is in the range of (i) 0.4 ≤ X ≤ 1.8 in the formula $\text{Bi}_2\text{A}_{2-x}\text{Re}_x\text{B}_3\text{O}_{12}$, and (ii) 0.01 ≤ X ≤ 2.0 in the formula $\text{Bi}_2\text{A}_{3-x}\text{Re}_x\text{B}_4\text{O}_{15}$.

Takayuki does not make up for the above-noted deficiencies of Mashino and Takeshima. Takayuki discloses that a ferroelectric thin film is formed on an oxide thin film of a bismuth based layer structured perovskite type crystal structure on a substrate. However, Takayuki does not disclose that the ferroelectric thin film includes at least one rare earth element Re selected from Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu, and an amount of substitution by the rare earth element Re, X, is in the range of (i) 0.4 ≤ X ≤ 1.8 in the formula $\text{Bi}_2\text{A}_{2-x}\text{Re}_x\text{B}_3\text{O}_{12}$, and (ii) 0.01 ≤ X ≤ 2.0 in the formula $\text{Bi}_2\text{A}_{3-x}\text{Re}_x\text{B}_4\text{O}_{15}$.

Iino does not make up for the above-noted deficiencies of Mashino, Takeshima and Takayuki. Iino does not disclose that a dielectric thin film further includes at least one rare earth element Re selected from Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu, and an amount of substitution by the rare earth element Re, X, is in the range of (i) 0.4 ≤ X ≤ 1.8 in the formula $\text{Bi}_2\text{A}_{2-x}\text{Re}_x\text{B}_3\text{O}_{12}$, and (ii) 0.01 ≤ X ≤ 2.0 in the formula $\text{Bi}_2\text{A}_{3-x}\text{Re}_x\text{B}_4\text{O}_{15}$.

In view of the above Mashino, Takayuki, Takeshima and Iino, either alone or in any combination, do not disclose or suggest the features recited in independent claim 1. Thus, independent claim 1 defines patentable subject matter. Claims 2, 4, 5, 9 and 11-13 depend

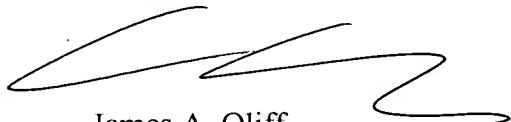
from independent claim 1, and therefore also define patentable subject matter. Accordingly, Applicants respectfully request that the rejection of claims 1, 2, 4, 5, 9 and 11-13 under 35 U.S.C. §103(a) be withdrawn.

Additionally, claims 3, 6-8 and 10 depend from independent claim 1, and therefore also define patentable subject matter. Accordingly, Applicants respectfully request rejoinder and allowance of withdrawn claims 3, 6-8 and 10.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-13 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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